

**SECTION 15105****BALL VALVES****PART 1 - GENERAL****1.01 SCOPE OF WORK**

The Contractor shall furnish and install ball valves complete and operable, including all appurtenances and accessories.

**1.02 RELATED WORK SPECIFIED ELSEWHERE**

Section 15100 - Valves, General

**PART 2 - PRODUCTS****2.01 PLASTIC BALL VALVE**

- A. General: Plastic ball valves shall be used at all PVC pipe installations where required, and be made of polyvinyl chloride (PVC). All valves shall have manual operators, unless otherwise specified or shown.
- B. Construction: All plastic ball valves shall have union ends or flanged ends to ANSI B.16.5, class 150, for easy removal. The balls shall have full size ports and Teflon seats. All body seals, union O-ring seals, and stem seals shall be Viton. The valves shall be suitable for a maximum working non-shock pressure of 150 psi at 73 degrees F for PVC.
- C. Suppliers or Equal:
  - 1. NIBCO Inc., (Chemtrol)
  - 2. Watts Regulator Company
  - 3. ITT Engineered Valves

**2.02 STAINLESS STEEL BALL VALVES**

- A. The steel ball valves, except as otherwise specified, shall be of the one-piece body, threaded end, "normal bore", manual operated type and shall be designed for a working pressure of 275 psi from -20°F to 100°F (ANSI Class 150). Operating handle shall align with the longitudinal axis of valve when open and be at 90° to the same axis when closed.
- B. Valve materials shall be as follows: valve body, gland, seat ring, stem, and ball of AISI Type 316 stainless steel. Bushing, packing, seat ring gasket, and seat shall be TFE. Thrust washer shall be glass-filled TFE.
- C. The valve stem shall be of the one piece blowout-proof type with inner end shoulder and inserted into position from inside the valve. Valve shall be of a twin seat design with all TFE and glass-filled TFE components being readily replaceable.

- D. Valves shall be designed for drip-tight shut-off in wet service applications at pressure differentials up to the full rating of the valve with pressure in either direction. Manual operator shall be sized to suit the maximum differential pressure across the valve. Manual operator components shall be of malleable iron, wrought steel, cast steel, or better materials and of a sufficiently sturdy design to permit operation under clogged or corroded conditions. Operator shall be equipped with stops at either end of its travel.
- E. The stainless steel valves shall be lever and/or electric operated, depending on the application shown on the Plans or called for elsewhere herein.

### **PART 3 - EXECUTION**

#### **3.01 GENERAL**

All valves shall be installed in accordance with provisions of Section 15100, "Valves, General." Care shall be taken that all valves in plastic lines are well supported on each end of the valve.

END OF SECTION